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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/960,497	09/24/2001	Katsumi Yamato	214130US2RD	5795

22850 7590 06/29/2004

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

ENG, GEORGE

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 06/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/960,497

Applicant(s)

YAMATO, KATSUMI

Examiner

George Eng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

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The inventions are distinct, each from the other because of the following reasons:

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statements filed 9/24/2001 (paper no. 2) and 6/30/2003 (paper no. 4) have been considered.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1, 7, 13 and 19, the term “any” renders the claims vague and indefinite because the term “any” has an alternative meaning, which does not positively identify the claimed limitation.

Claims 2-6, 8-12 and 14-18 are also rejected because of depending on claims 1, 7 and 13, respectively, containing the same deficiency.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1- are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawakami et al. (US 2003/0156569 A1 hereinafter Kawakami) in view of Thornberg et al. (WO 97/16039 hereinafter Thornberg).

Regarding claim 1, Kawakami discloses a mobile station (41, figure 1) for use in a radio communication system in which packet communications are carried out by setting up one or more connections between the radio communication device and a radio base station (3, figure 1), the radio communication device comprising a packet receiving unit configured to receive packets from the radio base station through the connections (page 5, [0052]). Kawakami differs from the claimed invention in not specifically teaching a timeout control unit for carrying out a timeout control in which any packet that cannot be received completely through one connection within a timeout interval that is set in advance with respect to the one connection is regarded as lost, a change in a number of active connections that are currently carrying out communications with the radio base station is detected, and a new timeout interval is calculated and set with respect to

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each connection when the change in the number of active connections is detected. However, Thronberg teaches a system for controlling packet transmission delay on one or more packet switched channels of a cellular system comprising a timer for setting a maximum average packet transmission delay, i.e., a timeout interval, in advance with respect to the one connection as regarded to lost (page 8 line 19 through page 10 line 22), a controller for expelling a packet call, i.e., carrying out a timeout control, in which any packet that cannot be received completely through one connection within the timeout interval (page 13 line 18 through page 14 line 18), and a PRCH traffic supervisor function for calculating a new timeout interval and set with respect to each connection when a change in the number of active connection is detected (page 20 line 20 through page 24 line 2) in order to avoid and reduce delays for packet switched channel users in applications that cannot tolerate a long packet delay time. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kawakami in having the timeout control unit for carrying out a timeout control in which any packet that cannot be received completely through one connection within a timeout interval that is set in advance with respect to the one connection is regarded as lost, a change in a number of active connections that are currently carrying out communications with the radio base station is detected, and a new timeout interval is calculated and set with respect to each connection when the change in the number of active connections is detected, as per teaching of Thronberg, because it avoids and reduces delays for packet switched channel users in applications that cannot tolerate a long packet delay time.

Regarding claims 2-3, Thronberg teaches the system for controlling packet transmission delay on one or more packet switched channels of a cellular system counting the number of

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active connections as a number of connections that are actually set up between the radio base station and radio terminals and for which packet transmission being carried out within a prescribed period of time (page 3 line 22 through page 4 line 14 and page 15 line 1 through page 16 line 15).

Regarding claim 4, Thronberg teaches the average transmission delay for each packet call increase as the number of packet calls on the packet switched channel increases (page 2 lines 28-30) so that one of ordinary skill in the to calculate and set the new timeout interval which is shorter than a previous timeout interval when the number of active connection is decreased or sets the new timeout interval which is longer than the previous timeout interval when the number of active connection is decreases.

Regarding claim 5, Thronberg teaches to leave the timeout interval unchanged for a connection for which a data transmission rate is guaranteed at a time of setting up that connection (page 24 lines 12-27).

Regarding claim 6, Thronberg teaches to calculate and set the new timeout interval with respect to a packet report that indicates each connection when a data transmission rate provided with respect to one of the connection is changed (page 20 line 25 through page 21 line 29).

Regarding claims 7 and 13, the limitations of the claims are rejected as the same reasons set forth in claim 1.

Regarding claims 8-9 and 14-15, the limitations of the claims are rejected as the same reasons set forth in claims 2-3.

Regarding claims 10 and 16, the limitations of the claims are rejected as the same reasons set forth in claim 4.

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Regarding claims 11 and 17, the limitations of the claims are rejected as the same reasons set forth in claim 5.

Regarding claims 12 and 18, the limitations of the claims are rejected as the same reasons set forth in claim 6.

Regarding claim 19, the limitations of the claim are rejected as the same reasons set forth in claim 1.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ohange (US PAT. 6,411,622) discloses a method for detecting timeout of ATM reception packet (abstract).

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington D.C. 20231

Or faxed to:

(703) 872-9306 (for Technology Center 2600 only)

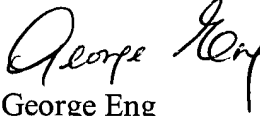
Hand delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, V.A., Sixth Floor (Receptionist).

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is 703-308-9555. The examiner can normally be reached on Tuesday to Friday from 7:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis A. Kuntz, can be reached on (703) 305-4870. The fax phone number for the organization where this application or proceeding is assigned is 703-308-6306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.


George Eng
Primary Examiner
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